

ABSTRACT

ILLUMINATING DEVICE WITH POLARIZATION RECYCLING IN A DOUBLE PRISM

The invention relates to an illuminating device comprising an optical source (S) emitting an unpolarized light beam (F1), a polarizing beam splitter comprising a grid polarizer (3) situated between the faces (10 and 20) of two prisms (1, 2). The light beam penetrates into the first prism through a face (12) and reaches the polarizing beam splitter (3) that transmits the light having a first polarization direction to the face (22) that reflects it toward an exit face (21). In addition, the splitter reflects the light having a second polarization direction to the face (12) that reflects it toward an exit face (11).

Application: Display and projection systems

Figure for the abstract: FIGURE 2a